§ 61.30–1 Scope.

The term *thermal fluid heater* as used in this part includes any fired automatic auxiliary heating unit which uses a natural or synthetic fluid in the liquid phase as the heat exchange medium and whose operating temperature and pressure do not exceed 204 °C (400 °F) and 225 psig, respectively. Thermal fluid heaters having operating temperatures and pressures higher than 204 °C (400 °F) and 225 psig, respectively, are inspected under subpart 61.05—Tests and Inspections of Boilers.

§ 61.30–5 Preparation of thermal fluid heater for inspection and test.

For visual inspection, access plates and manholes shall be removed as required by the marine inspector and the heater and combustion chambers shall be thoroughly cooled and cleaned.

[CGD 80-064, 49 FR 32193, Aug. 13, 1984, as amended by CGD 95–027, 61 FR 26002, May 23, 1996]

§ 61.30–10 Hydrostatic test.

All new installations of thermal fluid heaters must be given a hydrostatic test of 1½ times the maximum allowable working pressure. The test must be conducted in the presence of a marine inspector. No subsequent hydrostatic tests are required unless, in the opinion of the Officer in Charge Marine Inspection, the condition of the heater warrants such a test. Where hydrostatic tests are required, an inspection is made of all accessible parts under pressure. The thermal fluid may be used as the hydrostatic test medium.

§ 61.30–15 Visual inspection.

Thermal fluid heaters are examined by a marine inspector at the inspection for certification, periodic inspection and when directed by the Officer in Charge Marine Inspection, to determine that the complete unit is in a safe and satisfactory condition. The visual examination includes, but is not limited to, the combustion chamber, heat exchanger, refractory, exhaust stack, and associated pumps and piping.

[CGD 80–064, 49 FR 32193, Aug. 13, 1984, as amended by USCG–1999–4976, 65 FR 6501, Feb. 9, 2000]

§ 61.30–20 Automatic control and safety tests.

Operational tests and checks of all safety and limit controls, combustion controls, programming controls, and safety relief valves must be conducted by the owner, chief engineer, or person in charge at the inspection for certification, periodic inspection, and when directed by the Officer in Charge, Marine Inspection, to determine that the control components and safety devices are functioning properly and are in satisfactory operating condition. These tests and checks must be conducted in the presence of a marine inspector and must include the following: proper prepurge, burner ignition sequence checks, operation of the combustion controls, limit controls, fluid flow controls, fluid level controls, high temperature control, proper postpurge control, and verification of the flame safeguard.

[CGD 88–057, 55 FR 24237, June 15, 1990, as amended by USCG–1999–4976, 65 FR 6501, Feb. 9, 2000]

NOTE: Sections 63.05–90 and 63.10–90 of this chapter may be referenced concerning operating tests.

Subpart 61.35—Design Verification and Periodic Testing for Automatic Auxiliary Boilers

SOURCE: CGD 88–057, 55 FR 24237, June 15, 1990, unless otherwise noted.

§ 61.35–1 General.

(a) All automatic auxiliary boilers except fired thermal fluid heaters must be tested and inspected in accordance with this subpart and subpart 61.05 of this part.

(b) Fired thermal fluid heaters must be tested and inspected in accordance with subpart 61.30 of this part.

(c) All controls, safety devices, and other control system equipment must be tested and inspected to verify their proper design, construction, installation, and operation.

(d) All tests must be performed after installation of the automatic auxiliary boiler and its control system(s) aboard the vessel.

(e) As far as practicable, test techniques must not simulate monitored